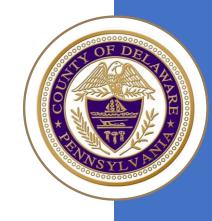
# Delaware County Sustainability Commission

November 18, 2021



## **Commission Meetings**

- Today's meeting is in-person. We are broadcasting through Zoom, so it is being recorded. For our regular online meetings, because the public can register to attend, we've stopped live-streaming, but will post to YouTube after.
- All meeting content will be posted to the Sustainability Commission website.

### **ONLINE FORMAT:**

- For online commission members, you are "panelists" and can unmute at any time.
- Public attendees are present but muted. Public comments can be given through the Q&A box, at any time. Public input can also be sent to <u>SustainDelco@co.delaware.pa.us</u>



# **Sustainability Commission Charge**

- To create recommendations regarding best environmental and energy practices...in many areas
- To identify and assess environmental and energy policies the County has adopted and provide recommendations to promote and educate about the County's environmental and energy initiatives
- To identify and provide recommendations regarding voluntary actions, projects, and programs for municipalities, businesses, non-profits, and other partners to implement County environmental and energy policies
- To create, review and provide ongoing input into a Delaware County Sustainability Action Plan
- To recommend Triple Bottom Line-related actions, projects, and programs to Council for implementation



# Agenda

- Welcome and Roll Call
- Approval of October Meeting Minutes
- Member appointments
- Chief Sustainability Officer Annual Report
- State of the Delaware County Sustainability and Climate Action Plan
- Committees Discussion
- Timeline/Meetings for 2022
- New Business/Announcements
- Public Comment and Questions
- Adjourn



# Congrats Carol!





### **DIVERSITY AWARDS**

**Division of Aviation** 

City of Philadelphia

and

#### **Carol Martsolf**

Director of Training, Urban Engineers
Equity, Diversity + Inclusion Committee, WTS International



# Welcome Bryn Mawr LCAP Students & Advisor!

- Saiqian Xiao
- Estefania Torres
- Don Barber

- Sent 150+ outreach emails
- Asking NGOs, EACs, Land Trusts, Watershed Assoc. Trail groups to distribute public survey
- Asking Municipalities for best POC and to schedule interview to ask survey questions.
- Entering GHG data into Clearpath to generate GHG inventory



# Approval of October Meeting Minutes



# **Member Appointments**



## Member Appointments

### Two Returning:

- Shawn Stancill energy efficiency representation
- Becca Yurkovich municipal manager/staff representation

### Two New Members:

- Cephus Hales-Richardson
  - environmental justice/historically marginalized community position
  - works for US Small Business Administration
  - resident of Chester
- Krystl Gauld
  - environmental justice/historically marginalized community position
  - works for affordable housing/homeless non-profit organization
  - resident of Upper Darby
- Thank you to Stephanie Howe Hasanali!!







# Delaware County's 1st Annual Sustainability Report - 2021



Francine Locke, Chief Sustainability Officer

# Delaware County – At a Glance

576,830 residents

49 municipalities

~3,000 staff members

31 County-owned buildings

2,495,985 SF of County-owned and maintained space

631 acres of County parks and open space

4.4 miles of County maintained trails

~300 vehicles

Significant
Opportunity for
Climate Action



# 2021 Sustainability Wins











### **Alternative Fuel Incentive Grant**







Solarize Delco completes largest project to date as the county takes a fresh approach to sustainability

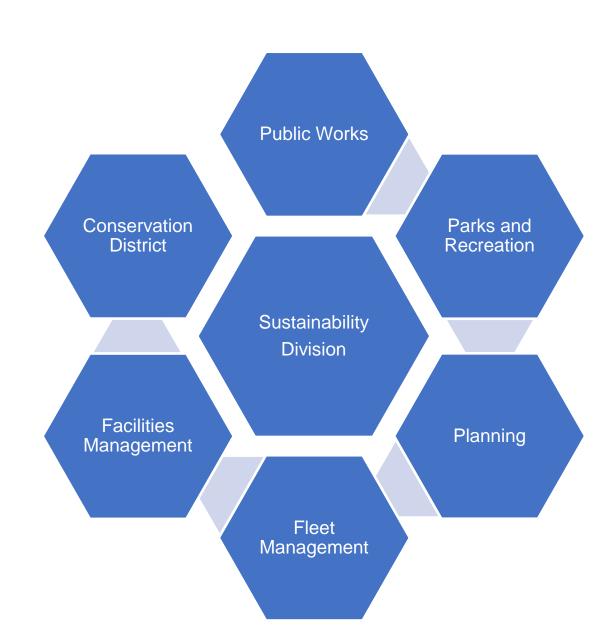
WHYY





# Delaware County Sustainability Division – 6 Departments

- Eliminating Silos
- Team Building
- Sharing Information
- Aligning Goals
- Connecting the Dots with Sustainability





# Streamlining County Operations 2021 – Starting Point and Approach

### **Process**

Work with Departments to Build Team, Gain Trust, Breakdown Silos

### **Actions**

Implement Actions that support Goals



### Data

Develop Performance and Sustainability Metrics and Baselines

### Goals

Recognize Successes,
Create Department Goals,
Align with County
Sustainability Goals



Parks and Recreation

Marc Manfre, Director

17 parks, 631 acres of parks and open space,

4.4 miles of trails, 21 staff



**Budget**Actual 2021 \$1,558,832
Proposed 2022 \$1,992,812



### Mission

To provide all residents with equitable access to high quality and sustainable recreation programs, outdoor natural spaces, facilities, and services. To create environments that are safe, healthy and enjoyable for all residents, while also protecting and preserving the natural resources within the County.

### **High-level Goals**

Increase the County's open space and trails.

Create an active youth recreation program.

Upgrade Parks and Recreation Infrastructure.



Protect and preserve the Delaware County watershed, natural resources and habitats.

Increase the number of partnerships and collaborators.

# Parks and Recreation - 2021 Sustainability Highlights

### **ELECTRONICS RECYCLING COLLECTION**



COVANTA

**EVENT DETAILS** · Place all items in car trunk/

PRC follows all federal state/local health and

Visit website for details

#### **DELAWARE COUNTY**

Upland County Park 280 6th Street, Upland, PA 19015

Wednesday, Oct 27, 2021 9 am - 1 pm

#### NO RECYCLING FEE CHARGED

#### ITEMS ACCEPTED:

- Televisions (1 per registration)
- Computer monitors and printers
- CPU (towers), laptops, mice and keyboards
- Desktop copiers and scanners
- Tablets, routers and modems
- Home and cell phones
- Cable boxes and electronic cables
- DVD players, VCRs, stereos and video game consoles



#### **ADVANCE REGISTRATION REQUIRED** prc.org/DelcoCollection • 610-353-1555 x3

### **Delaware County Yard Tree Giveaway**



**Largest Park in County History** 



**Summer Concert Series** 



**Rose Tree Park Hawk Watch** 



**Re-Opened Redwood Senior Center** 

### The 10 Best Places to Go Mountain Biking Near Philadelphia







Planning Department
Tom Shaffer, Interim Director
14 staff members



### **Budget**

Actual 2021 \$1,169,741 Proposed 2022 \$1,332,605



#### Mission

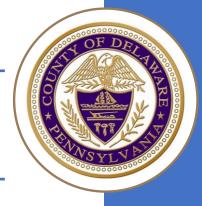
To promote the sound and sustainable development and redevelopment of Delaware County through the application of contemporary and forward-thinking planning principles and smart growth concepts, while maintaining and enhancing the cultural, economic, and environmental livability of the County.

### **High-level Goals**

Preserve and enhance the diversified mix of land uses and provide for orderly and coordinated development that sustains a high quality of life.

Conserve natural and cultural resources, increase and enhance the environmental and/or recreational value of lands, and develop a greenway network

Improve transportation safety and capacity, expand the transportation network, and integrate all modes into one complete system



Identify and document historic resources; Protect resources that have the most meaning, cultural impact, or historical significance; Promote the benefit that historic resources and preservation practices contribute to the County's character and future prosperity.

Enrich the supply and variety of quality housing stock; Provide for the housing needs of residents of all ages, abilities, and incomes; Collaborate across organizations and municipalities to share information and resources.

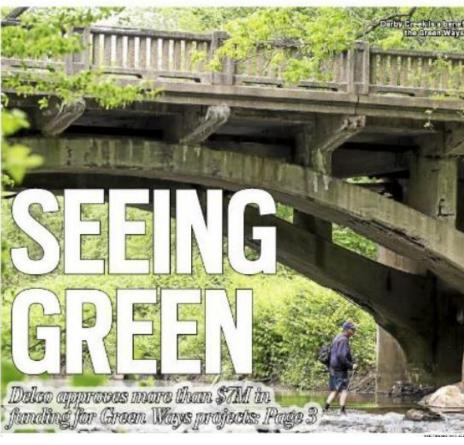
# Planning Department - 2021 Sustainability Highlights



- DELCO GREEN WAYS GRANT PROGRAM
- **DELCO GREEN SPACE TASK FORCE**
- **DELCO TRAILS ALLIANCE**
- DELCO RETURN ON ENVIRONMENT STUDY



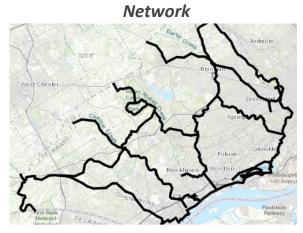




# GIS Sustainability Data Mapping



Environmental Features of Delaware County



**Delaware County's Primary Trail** 



Delaware County Transportation
Improvements Inventory
Legend

#### TII - Points

- Road
- Bicycle/Pedestrian
- Transit
- Bridge

#### TII - Lines

- Bicycle/Pedestrian
- —— Road
- ---- Transit

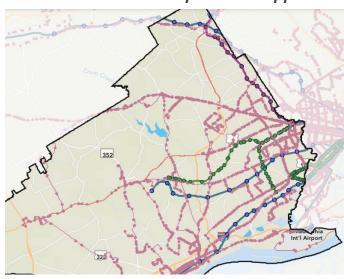
### TII - Polygons

Transit

Green Stormwater Infrastructure
In Delaware County



**Interactive Transportation App** 



https://portal-dcpd.opendata.arcgis.com/



**Edward Magargee, Director**6 staff members



### **Budget**

Actual 2021 \$311,740 Proposed 2022 \$325,145



### Mission

To ensure the wise use of Delaware County's natural resources and to protect and restore the natural environment through the conservation of its soil, water, and related resources.

### **High-level Goals**

Ensure construction projects throughout the County have permitted stormwater management plans that adequately control soil erosion and sediment runoff.

Ensure the protection of waterways and wetlands through the implementation of a water obstruction and encroachment permitting program.



Support municipalities in low volume road improvements & environmental benefit projects.

Act as a County leader in watershed stewardship and environmental restoration.

# Conservation District - 2021 Sustainability Highlights

**Coordinating with environmental** groups throughout the County







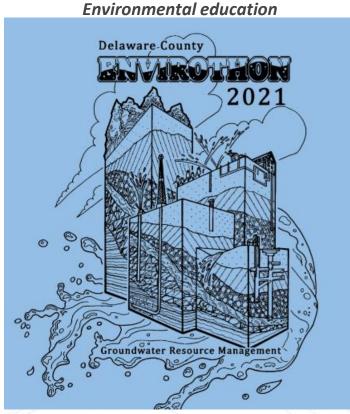




Watershed restoration projects











Facilities Management<br/>Ed Orner, Facilities Manager

70 buildings with 2,495,985 SF of space, 36 Staff Members



### **Budget**

Actual 2021 \$3,169,007

Proposed 2022 \$3,480,361



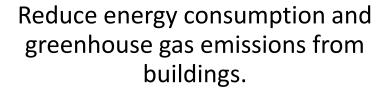
### Mission

To provide efficient, sustainable, innovative and highquality facilities to the public and County staff.

### High-level Goals

Increase efficiency of County's Work Order System.

Create a preventive building system maintenance program.



Increase waste diversion from landfills.





Public Works

Dr. Sharon Jaye, Interim Director

7 staff members



### Budget

Actual 2021 \$164,000 Proposed 2022 \$414,771





To provide efficient, sustainable and high-quality facilities and infrastructure services to the Courts, County Departments, public, and staff members through the capital improvement program. To assist the Facilities Management Department in their efforts to minimize waste, increase energy efficiency, and reduce greenhouse gas emissions through the implementation of capital upgrades and equipment replacement.

### **High-level Goals**

Work with leadership to develop a 10-year capital improvement program incorporating green design standards.

Improve capital, bridge, and facilities fiscal management.



Manage leased properties more efficiently.

### Facilities Management and Public Works

2021 Sustainability Highlights

- Purchased 100% Green-e<sup>®</sup> Energy Certified Renewable Energy Credits (RECs) (\$0.00092/kWh) in Wind Energy through 2023.
- Joined DVRPC Regional Power Purchase Agreement to find renewable energy at greatest value to Bucks, Chester, Delaware and Montgomery Counties.
- Completed Facility Condition and Needs Assessment of all countyowned buildings with ASHRAE Level 2 Energy Audits.
- Published Draft FY 2022-26 Capital Improvement Program.

# Baseline Building Energy Usage (kWh)

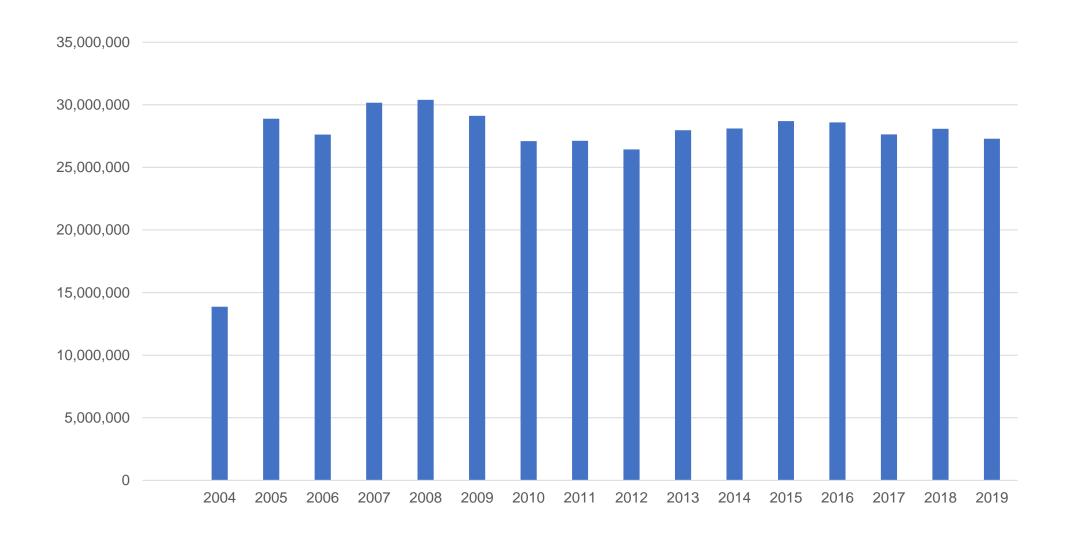
Electric Usage	Electric- Solar (-)	Electric Actual	Natural Gas
27,287,041	264,038	27,023,003	1,311,622
26,729,605	294,191	26,435,414	1,418,789
	Usage 27,287,041	Usage Solar (-) 27,287,041 264,038	Usage         Solar (-)         Actual           27,287,041         264,038         27,023,003



subtracted from County's electric usage

Data from KCBA FCNA 2021 Report

## County Buildings Electricity Usage 2004 to 2019 kWh





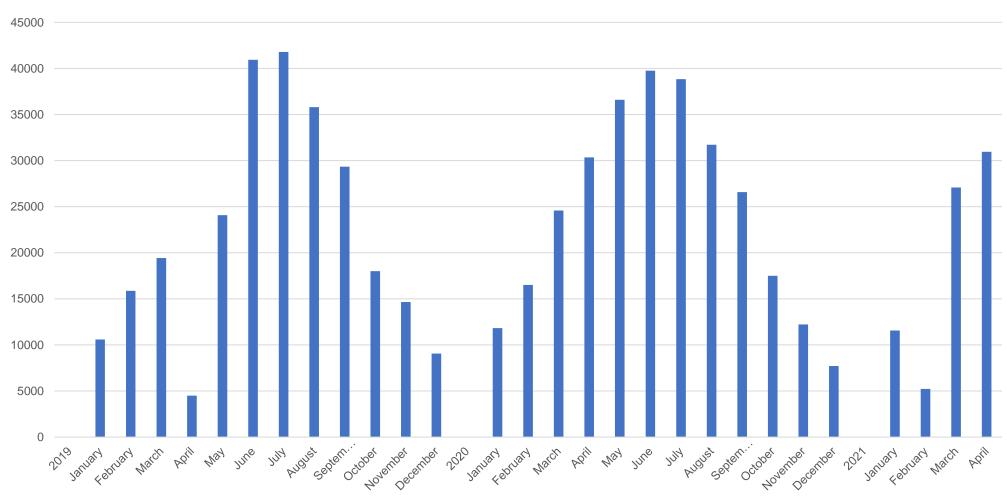
### Solar Panels on Government Center Roof



2020 - Produced 294,191 kWh of electricity

# Solar Energy from Government Center (kW)

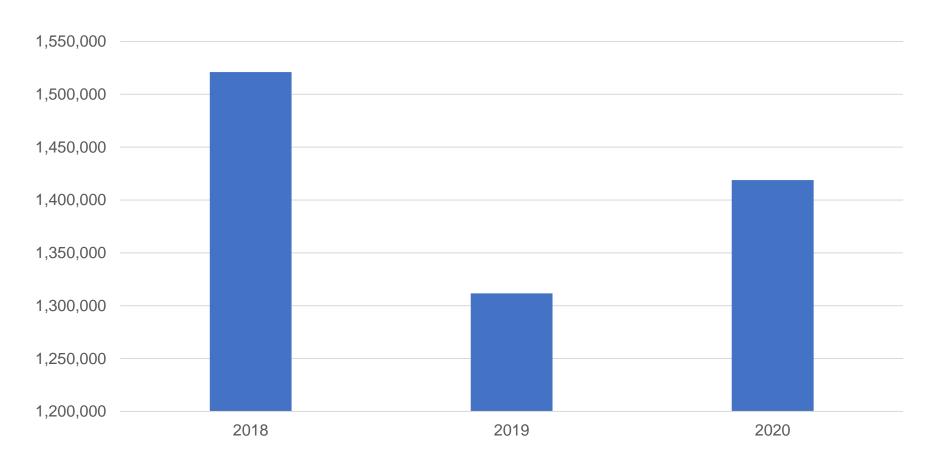






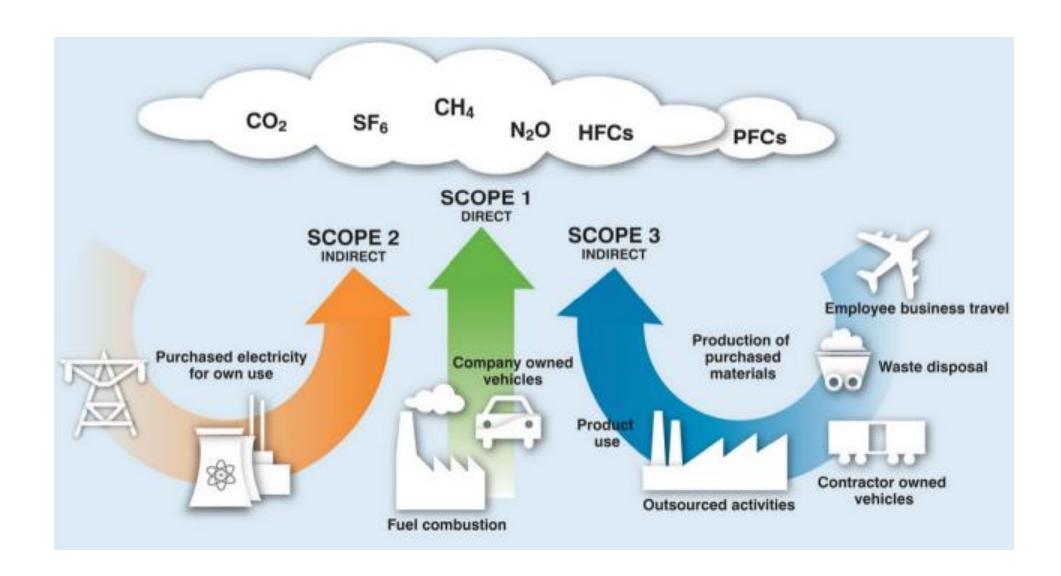
# Natural Gas Usage







# **GHG Emissions from County Operations**





# Baseline from County-Owned Buildings Energy Consumption and Greenhouse Gas Emissions

			kBtu	kBtu	MMBTU	MMBTU	2019	2020	
Fuel	kgCO2e/MBTU	kBtu	2019	2020	2019	2020	KgCo2e	KgCo2e	
Natural Gas	53.06	100	131,162,200	141,878,900	131,162	141,879	6,959,466	7,528,094	
Electric	95.06	3.412	92,202,485	90,197,632	92,202	90,198	8,764,857	8,574,274	
Propane	63.07	91.5			0	0			\
No.2 Oil	73.15	138.5							
District Steam	78.95	1194							
						MtCO2e/Yr	15,724	16,102	
				Т	otal cars off	the road (eq)	3,397	3,479	
				Total acres	of pine trees	planted (eq)	3,574	3,660	



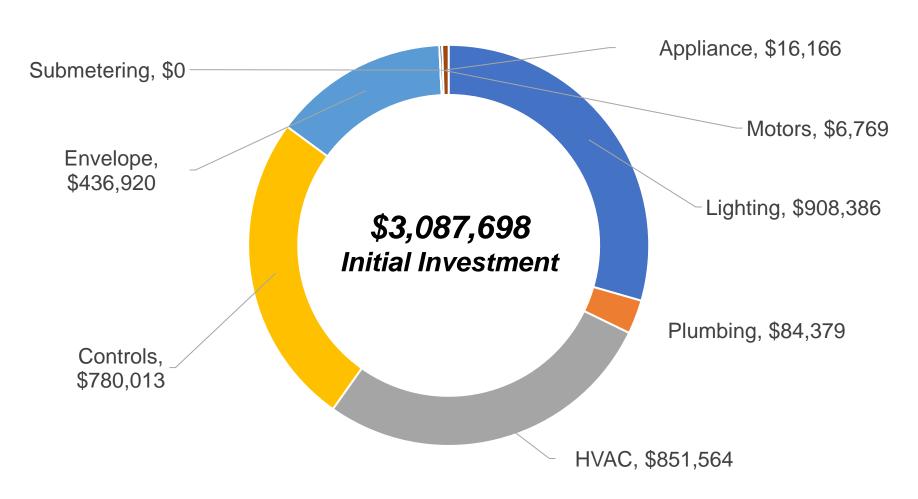
# Potential Energy Saving Projects from FCNA

- 63 Types of energy and water saving measured identified in County Buildings
- \$3,087,698 Projected initial investment for recommended green measures
- \$530,701 Projected first year savings from the recommended green measures
- 5.8 Years Simple Payback
- Measures will be incorporated into Facilities Master Planning and capital improvement program



# **Energy Conservation Measures (ECMs)**

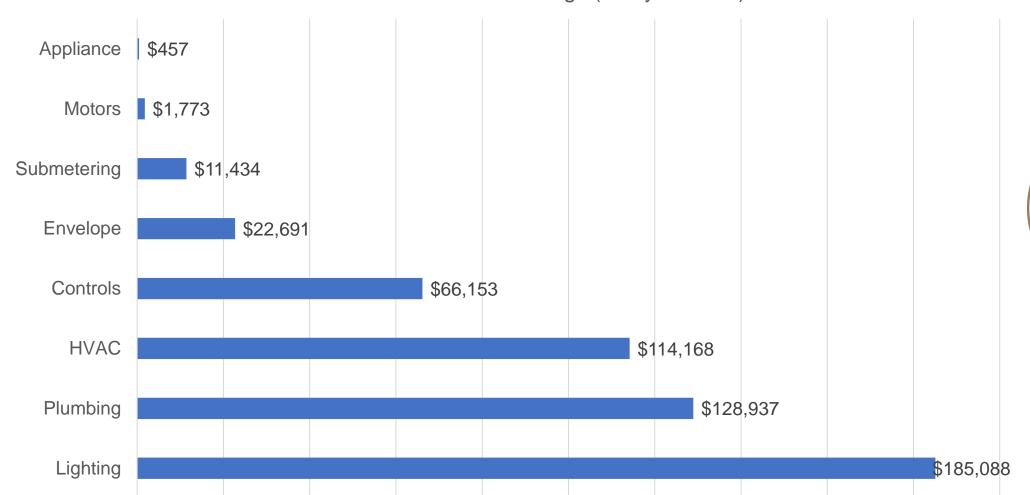
Projected Initial Investment - Portfolio Wide Green Measures

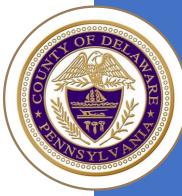




# **Estimated Cost Savings from ECMs**







# Waste – County Building Baselines January 2021 to Present



Waste Type	Amount
Trash	1,507.84 Tons
Recycling	834.72 Tons  35% Diversion Rate
	Nato



The total generation of municipal solid waste (MSW) in the US in 2018 was 292.4 million tons or 4.9 pounds per person per day. US EPA



Fleet Management
Brian Hudak, Director
300+ Vehicles (15 EVs, 16 Hybrids)
3 EV charging locations, 8 staff members



### Budget

Actual 2021 \$268,711

Proposed 2022 \$331,972



#### Mission

To provide safe, efficient, reliable and sustainable fleet management services that support the County's and Court's operations.

### High-level Goals

Reduce the County's Greenhouse Gas emissions and reliance upon fossil fuels.

Phase-out fossil fuel burning vehicles.

Install additional EV charging stations.

Increase efficiency of motor vehicle maintenance.

Enhance written standard operating procedures and streamline processes.

Finalize and communicate procedures and policies to County and Courts staff.



## Fleet Management – 2021 Sustainability Highlights

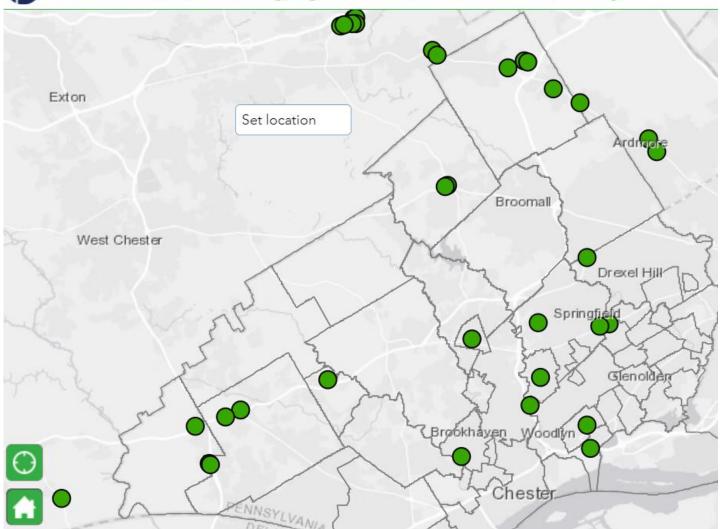
- Commitment to transitioning to 100% Electric
- Won PA DEP AFIG Grants!
- 300+ Vehicles Inventory
  - 15 are EVs
  - 16 are Hybrids
- 3 Charging Station Locations
- Working with the Eastern PA Alliance for Clean Transportation to develop PA DEP AFIG Grant application for December 2021 to purchase additional EVs and install additional charging stations.





## GIS Group - Delco EV Charging Stations Map

Electric Vehicle Charging Stations in Delaware County





Sustainability Plan – September 2022

Targets, Goals and Actions for:

- Energy
- Health and Wellness
- Transportation
- Waste and Resource Management
- Climate Resiliency
- Natural Resources

Local Climate Action Plan – September 2022

- GHG Inventory
- Reduction Plan
- Resiliency, Climate Adaptation, Mitigation
- 10-year Municipal Solid Waste Management Plan Zero Waste
- Vehicle Electrification
- Energy Conservation Measures CIP
- Stormwater Management CIP
- Build Partnerships





# State of the Sustainability Plan



## Following ICLEI Process Framework





## Plan Development Schedule

#### **Pre-Planning**

Designate sustainability coordinator

Form Sustainability Commission and kick-off meetings

Develop a work plan for planning and outreach

Gather ideas from stakeholders

#### Sustainability Assessment

Define high-level goals

Review existing plans

Inventory existing measures and metrics for baselines

Complete a climate vulnerability assessment

Complete a GHG inventory

### **Goal & Target Establishment**

Define SMART goals with emission targets

Brainstorm possible strategies

Solicit ideas from the stakeholders

Announce goals

#### **Plan Development**

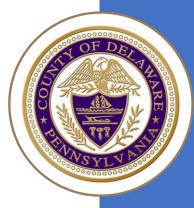
Develop and prioritize actions

Develop implementation plans for each action

Perform public outreach on actions

Write the plan

Finalize and release the plan



# Plan Development Schedule

Sustainability and Climate Action Plan Schedule		2021				2022													
	Status	July	Aug	Sep	ot Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Milestone 0: Pre-planning																			
Designate a sustainability coordinator	complete																		
Obtain chief elected buy-in	complete																		
Organize interdepartmental governmental team	complete																		
Form a sustainability plan advisory board	complete																		
Form a climate action plan task force (same as advisory board)	complete																		
Develop a work plan for planning process	complete																		
Develop a work plan for public outreach	complete																		
Develop a community engagement strategy	complete																		
Kick off sustainability advisory board meetings	complete																		
Gather ideas for the scope of the plan	complete																		
Launch and publicly announce the planning process																			
Milestone 1: Conduct Sustainability Assessment																			
Begin to define the high level goals/scope of the plan	complete																		
Review existing Delco/PA plans, i.e., 2035 Plans (5), PA CAP																			
Inventory existing sustainability measures, i.e., County's work	in progress																		
Gather and analyze data for the assessment to define key issues	in progress																		
Solicit ideas from the public/stakeholders on the goals, guiding principles,																			
and key challenges	in progress																		
Create a sustainability assessment report																			
Implement community engagement strategy	in progress																		
Complete a climate vulnerability assessment																			
Complete a community-wide GHG inventory in pro																			
Forecast business-as-usual emissions																			
Milestone 2: Establish Sustainability Goals																			
Define clear, relevant, measurable goals and emissions target																			
Test the achievability of your goals by brainstorming possible strategies																			
Solicit ideas from the public for sustainability goals																			
Announce your goals to the public (for Earth Day?)											?								
Establish emissions targets																			



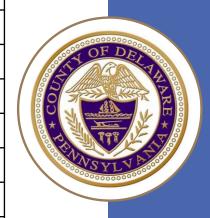
#### Schedule – Milestone 0 - Pre-Milestone Planning

Action	Current Status	Timeline
Designate a sustainability coordinator	complete	June
Obtain Executive Director and Council buy-in	complete	June
Organize interdepartmental governmental team	complete	June
Form a sustainability plan advisory board, i.e., Sustainability Commission	complete	June
Form a climate action plan task force, i.e., Sustainability Commission	complete	Aug-Oct
Develop a work plan for planning process	in progress	October
Develop a work plan for public outreach	in progress	October
Develop a community engagement strategy	in progress	Sept-Oct
Kick off Sustainability Commission meetings	complete	June
Gather ideas for the high level goals/scope of the plan	complete	June-Sept
Launch and publicly announce the planning process	complete	



### Schedule – Milestone 1 – Sustainability Assessment

Action	<b>Current Status</b>	Timeline
Begin to define the scope of the plan	complete	June-Sept
High-level goal development	complete	June-Sept
Inventory existing sustainability measures based on high-level goals	in progress	Aug-Dec
Review existing Delco plans; GIS data; department collection	in progress	Aug-Dec
Gather and analyze data for the assessment to define key issues	In progress	Nov-Dec
Solicit ideas from the public/stakeholders	In progress	Oct-Jan
Create webpage for engagement	complete	Nov
Create presentation for EAC/NGO meetings	complete	Nov
Internal - hold departmental meetings	in progress	Oct-Jan
Internal – feedback method for county employees	In progress	Oct-Jan
Municipalities - Interview #1	in progress	Oct-Jan
Municipalities - Survey #1 for data gathering		Oct-Jan
Municipalties - Reach out to EACs and attend next mtg	in progress	Oct-Jan
Public - Survey #1	in progress	Oct-Jan
Public - Email NGOs/others for POC and survey distribution	in progress	Oct-Jan
Public - Open meeting Nov. 29	planning	Oct-Jan
Create a sustainability assessment report		Jan-Feb



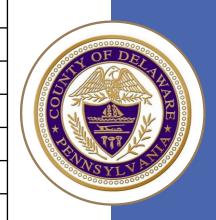
### Schedule – Milestone 1 – Sustainability Assessment (LCAP)

Action		<b>Current Status</b>	Timeline
Implem	ent community engagement strategy	in progress	Sept-June
Comple	te a climate vulnerability assessment		Dec-Jan
In	vestigate ICLEI framework		Dec-Jan
W	ork with GIS to gather data		Dec-Jan
Cr	reate report		Dec-Jan
Comple	te a community-wide GHG inventory	In progress	Aug-Nov
	EP request data (utilities, DVRPC, etc.)	complete	Aug-Nov
De	etermine inventory type	complete	Aug-Nov
St	udents enter data into ClearPath	In progress	Aug-Nov
Forecast	t business-as-usual emissions		Oct-Dec



## Schedule – Milestone 2 – Establish Sustainability Goals

Action					
Define clear, relevant, measurable goals and emissions targets					
Review results of assessment and determine baselines					
Prioritize goals					
Develop 2 emissions target levels: community-wide and county operations					
Test the achievability of your goals by brainstorming possible strategies	Feb-Apr				
Perform high-level analysis of potential strategies	Feb-Apr				
Estimate potential emissions reductions of each strategy					
Solicit ideas from the public for sustainability goals - outreach					
Internal:	Feb-Apr				
Municipal:					
Public:	Feb-Apr				
Announce your goals to the public					
Press release by council? Kick-off event on earth day?	Apr				
Website update	Apr				
Public education campaign	Apr				
Establish emissions targets	Nov-Dec				



### Schedule – Milestone 3 (Part 1) – Develop Sustainability Plan

Action	Timeline
Develop and prioritize measures	Apr-June
develop list of potential measures for detailed analysis	Apr-June
Analyze potential measures contribution to goals; costs/benefits	Apr-June
Prioritize and select measures (short-term vs long-term)	Apr-June
Define indicators and data sources and gather baseline data	Apr-June
estimate emissions reduction potential of each measure	Apr-June
Develop climate action goals, onjectives and measures	Jan-May
Develop implementation plans for each measure	May-Aug
Define timeline, responsible party, and key milestones	May-Aug
Identify available funding and gaps	May-Aug
Designate implementation coordinator for each	May-Aug
Develop implementation and monitoring strategy	Mar-Apr
Prepare for the public outreach process	Mar-May
Plan for outreach to public and key stakeholders (similar to 1-outreach)	Mar-May
Develop easy-to-understand presentation	Mar-May
Perform outreach	Apr-June
Internal:	Apr-June
Municipal:	Apr-June
Public:	Apr-June



#### Schedule – Milestone 3 (Part 2) – Develop Sustainability Plan

Action	Timeline		
Create an outline for the plan	Mar-May		
Develop outline	Mar-May		
assign sections	Mar-May		
Develop draft climate action plan	Feb-July		
Write the plan	June-Aug		
Develop narrative for overall rationale	June-Aug		
Develop explanations and rationale for each measure	June-Aug		
Designate master editor	June-Aug		
Write and produce plan (graphic design too)	June-Aug		
Release a draft plan for public comment	Aug		
Finalize and release the plan	Sept		
chief official announce plan and release it	Sept		
Formally adopt or approve plan	Sept		
Finalize and adopt climate action plan	Sept		



#### Summary – What's Happening Now!

#### Point everyone to this page for links and updates:

https://www.delcopa.gov/sustainability/plan.html

#### **Opportunities to get engaged:**

- Sustainability Plan Public Workshop November 29, 2021 6:00-8:00pm <u>Register for in-person attendance</u>
- General Public Survey extended to December 15, 2021
- Sustainability Draft Goals Feedback Form closes December 31, 2021

#### **Baseline Assessment:**

- GHG Inventory with LCAP in process
- Energy data from FCNA; partial solid waste data from vendor
- Departments working on metrics from county operations
- Performing outreach on other possible metrics for high level goals



### Questions?



#### **Committee Structure**

- Health and Wellbeing
- Natural Resources
- Transportation
- Energy
- Waste and Resource Management
- Climate Resiliency
- Equity and Inclusion



Public Comment: <u>SustainDelco@co.delaware.pa.us</u>

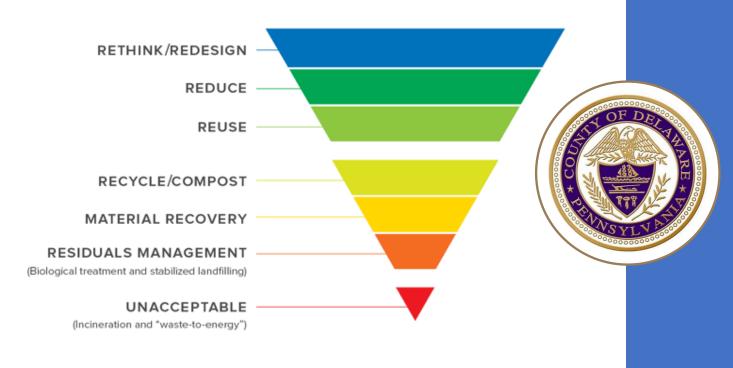
### Committee Report-Out

Zero Waste Task Force recommends the commission use the following zero waste definition in the high-level goals:

"Zero Waste: The conservation of all resources by means of responsible production, consumption, reuse, and recovery of products, packaging, and materials without burning and with no discharges to land, water, or air that threaten the environment or human health."

Zero Waste International Alliance: <a href="https://zwia.org/zero-waste-definition/">https://zwia.org/zero-waste-definition/</a>

#### THE ZERO WASTE HIERARCHY 7.0



© Zero Waste International Alliance zwia.org/zwh

Public Comment: <u>SustainDelco@co.delaware.pa.us</u>

## Meeting Schedule for 2022?

#### Current (alternating)

- 3<sup>rd</sup> Thursday at 6:00pm
- 3<sup>rd</sup> Friday at 2:00pm

#### Consider?

- 2<sup>nd</sup> Thursday at 6:00pm; 2<sup>nd</sup> Friday at 2:00pm
- 4<sup>th</sup> Thursday at 6:00pm; 4<sup>th</sup> Friday at 2:00pm
- Other time alternates?



### **Public Comment**

"SustainDelco email content" – new document in google drive in the communications-outreach folder containing all text from emails



# Other Business/Announcements

• Next meeting – December 16, 6:00pm

